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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,121	04/01/2004	Chishio Hosokawa	251364US0DIV	8005

22850 7590 01/11/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
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ALEXANDRIA, VA 22314

EXAMINER
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YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/814,121

Applicant(s)

HOSOKAWA ET AL.

Examiner

Marie R. Yamnitzky

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This Office action is in response to applicant's amendment filed October 20, 2004, which amends the specification, the abstract and claims 24-26, and adds claims 30-32.

Claims 24-32 are pending.

This Office action is also in response to the Rule 132 Declaration of Chishio Hosokawa filed October 20, 2004.

2. The October 20<sup>th</sup> amendment to the specification does not utilize the correct format for correction of formula (41). The deletion of the incorrect formula needs to be shown by the use of strikethrough or double brackets.

3. The October 20<sup>th</sup> amendment to the abstract and claims 24-26 utilizes underlining and strikethrough to indicate added and deleted text, respectively, as required by 37 CFR 1.121. However, the abstract and claims 24-26 contain underlining that was part of the previous abstract and claim text (the underlining in the symbol " $\geq$ ").

The examiner suggests that the abstract be resubmitted as a replacement abstract rather than an amended abstract, so that the symbol " $\geq$ " is not mistaken as an addition of ">" to the text.

With respect to claims 24-26, these claims should be represented as new claims if further amendments are made to these claims, with retention of the symbol " $\geq$ " in the claim text. If no further amendment is made to claims 24-26, they should be set forth in the next amendment as "previously presented" with retention of the symbol " $\geq$ " in the claim text.

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4. The objection to the abstract as set forth in the Office action mailed July 29, 2004 is overcome by the October 20<sup>th</sup> amendment.

5. The disclosure stands objected to for informalities as set forth in the Office action mailed July 20, 2004 since the October 20<sup>th</sup> amendment to the specification does not utilize the correct format to delete the incorrect version of formula (41).

6. Claims 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Proper antecedent basis is lacking for "The" material for a blue-light emitting organic electroluminescent device as recited in the preamble of claims 30-32. "The" should be changed to --A--.

7. Claims 24-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-251633 or US 6,280,859 B1 for reasons of record in the Office action mailed July 29, 2004.

Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-251633 or US 6,280,859 B1 for the same reasons that claims 24-29 are rejected.

The preamble recitation in claims 30-32 of "material for a blue-light emitting organic electroluminescent device" adds no positive limitations to the material as claimed in claims

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24-26, and claims 30-32 are unpatentable over the prior art for the same reasons that the claims from which they depend are unpatentable.

8. Claims 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-251633 or US 6,280,859 B1, either further in view of JP 9-268284, for reasons of record in the Office action mailed July 29, 2004.

Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-251633 or US 6,280,859 B1, either further in view of JP 9-268284, for the same reasons that claims 24-26 are rejected.

The preamble recitation in claims 30-32 of “material for a blue-light emitting organic electroluminescent device” adds no positive limitations to the material as claimed in claims 24-26, and claims 30-32 are unpatentable over the prior art for the same reasons that the claims from which they depend are unpatentable.

9. Applicant’s arguments filed October 20, 2004 have been fully considered in conjunction with the Rule 132 Declaration of Chishio Hosokawa, but they are not persuasive.

Applicant argues that chrysene compounds as required by the present claims are superior in blue light emission and color purity.

It is the examiner’s position that the results set forth in the Rule 132 Declaration are not unexpected. The prior art demonstrates that compounds of prior art formula [1] which differ only in the divalent residue represented by A emit different colors. For example, prior art

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compound (1) emits blue light, prior art compound (2) emits green light, and prior art compound (3) emits bluish green light. See columns 47-50 in the '859 patent for the chemical formulae for compounds (1)-(3), and see Examples 1-4 in columns 183-184 of the '859 patent.

The prior art also teaches that the color of light emitted by a device utilizing a particular compound of prior art formula [1] may be modified by utilizing a second light-emitting material in combination with the compound of formula [1]. For example, see Examples 87-94 (c. 193-194) and c. 196, l. 1-5 in the '859 patent.

The prior art teaches that compounds of prior art formula [1] provide electroluminescent devices having high light emission brightness and efficiency, as well as long device life. One of ordinary skill in the art would have been motivated to make a variety of compounds within the scope of prior art formula [1] for use in an electroluminescent device as taught by the prior art. One of ordinary skill in the art would have reasonably expected the benefits taught by the prior art to be obtained with a compound of prior art formula [1] wherein A is chrysene since the prior art examples demonstrate that a variety of specific compounds within the scope of prior art formula [1] provide those benefits. For example, see c. 195, l. 53-c. 196, l. 21 of the '859 patent.

The present claims are directed to a material and the only positive limitation of the material is the chrysene compound. The examiner maintains the position that the chrysene compounds according to the present claims would have been obvious to one of ordinary skill in the art at the time of the invention having knowledge of the prior art disclosures.

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10. Miscellaneous:

In line 2 of claim 27, the second "c" should apparently be --d--. This error was present in claim 27 as presented in the preliminary amendment filed April 01, 2004, but not previously noted by the examiner.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY  
January 07, 2005



MARIE YAMNITZKY  
PRIMARY EXAMINER

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